CHAPTER FIVE
GAPS, OVERLAPS AND INTERAGENCY COORDINATION

The following gaps, overlaps and opportunities for improved interagency coordination were identified in agency survey responses and through research of legislation, regulations and other reference materials.

POINT SOURCES OF POLLUTION

Gaps

- o Discharge permitting standards are based only on regulated constituent concentrations in the effluent. As a result, the impact of unregulated toxics and other constituents are not addressed through the permitting process. Additionally, there is no consideration of the other potential impacts of increased overall discharge volumes on a tidally influenced aquatic habitat such as Armand Bayou.

- o Lack of a formal environmental policy for the Texas Water Commission (TWC). An agency-wide environmental policy would help to strengthen TWC's expanding role in protecting the State's environment. One objective of such a policy could be to set forth a more comprehensive evaluation of the environmental impacts of wastewater discharges during the permit application process.

- o Lack of a cumulative assessment of the impact of existing and new wastewater discharges in the permit review process. EPA and TWC do not provide other reviewing agencies with data on the cumulative contributions of existing discharges to the watershed.

- o Oil and gas-related discharges are not regulated for all potential toxics. The Texas Railroad Commission (RRC) regulates wastewater discharges associated with oil and gas drilling activity. However, oil and grease are the only pollutants from these discharges which are regulated. Other pollutants with the potential to degrade the Armand Bayou environment, such as Total Suspended Solids and brines, are not regulated by the RRC.

Overlaps and Interagency Coordination

- o EPA and TWC currently overlap in permitting authority for municipal and industrial discharges. Permits are currently required from both agencies, though delegation of permitting authority to the TWC under the National Pollutant Discharge Elimination System (NPDES) is pending. While there is a duplication of effort in dual permitting there is some division of opinion as to whether this overlap is indeed a management problem. There are concerns that eliminating EPA's direct involvement in the process will leave uncertainty as to how determinations to require an Environmental Impact Statement will be made in the permitting process.

- **Enforcement agencies could benefit from additional coordination.** Federal, state and local authorities all have some level of enforcement authority over point source discharges, however, there is currently no plan or policy to coordinate enforcement efforts by the various agencies involved. While enforcement by multiple autonomous agencies is a necessary part of a system of checks and balances, a coordination system could help to maximize the limited resources available.

- **There is a lack of coordination between state and local government in planning the development or expansion of wastewater treatment facilities.** Local governments and municipal utility districts plan wastewater treatment facilities to meet their own needs. Environmental management objectives downstream are not necessarily a consideration. As a result state/local interaction in the facility development and expansion is dealt with at the permitting stage, after considerable planning has been conducted by the local government.

  Closer coordination in watershed management would make local governments more aware of state management objectives and allow for mutually satisfactory solutions to be reached earlier in the facility planning process. Mitigation strategies may also be less expensive and more effective if developed in early project planning stages.

NONPOINT SOURCES OF POLLUTION

Gaps

- **There are no federal or state regulations currently in place to manage nonpoint source water pollution from urban runoff.** EPA and TWC currently have the legislative authority to require local governments to implement nonpoint source water pollution management practices, although the regulations are not presently in place. The forthcoming EPA NPDES permit requirements for stormwater discharges, now expected to be issued in October 1990, will essentially require local governments to develop nonpoint source management plans. However, many questions about the permitting process remain, such as municipal vs. watershed-wide permits, local government's financial capability for compliance, EPA's resources for administering and enforcing a new program of this scale.

  When promulgated, the TWC's pollution control and abatement program regulations will also require local governments to implement management practices to limit nonpoint source pollution. These rules are presently in the discussion stage and are not likely to be adopted before February or March 1991. Questions also remain about this program's cost to local governments and the resulting administrative and enforcement burden on TWC.

- **Local governments in the Armand Bayou watershed do not have a regulatory framework in place to manage nonpoint source water pollution.** Future federal and state

requirements notwithstanding, none of the local governments presently have a comprehensive nonpoint source management program in place. Establishment of such programs will require additional regulation of development and construction activities, more aggressive enforcement of illegal disposal of hazardous waste in the stormwater system, costly monitoring and possibly structural controls.

- **Preventing illegal discharge of pollutants into the storm sewer system is difficult, particularly at the household level.** Each of the cities and Harris County do investigate for illicit discharges. However, resources are limited for preventing non-structural discharges and the disposal of household hazardous waste via the stormwater system. Owing to the increasing expense of disposing of hazardous materials and the concentration of industrial and medical facilities in the region, the potential exists for illegal disposal of toxics which may present public health risks.

- **There is currently no local regulation of erosion from construction projects.** Though local erosion control plans will be a requirement of the TWC pollution control and abatement program, the regulatory framework is not presently in place at the local government level. There is some debate about the actual contribution of pollutants from construction-related sediments, the cost-effectiveness of requiring such a program and its impacts on the construction industry.

  Additionally, much of the watershed lies within unincorporated Harris County, which does not have ordinance-making authority. While erosion controls could be extended to cover the extraterritorial jurisdiction of municipalities, this measure would not be required under the proposed TWC regulations.

- **Houston, Pasadena and unincorporated Harris County have limited land use controls.** Though these local governments have limited or indirect controls governing impervious surface ratios and noxious land uses, they do not have comprehensive zoning ordinances. As a result, land use is governed by a patchwork of development-related ordinances and private deed restrictions, making it more difficult to formulate strategies to manage development-related nonpoint source pollution.

- **Design orientation of local storm sewer systems is geared toward flood control, not pollution abatement.** As a result, planned storm drainage projects may contribute to significant degradation of the water quality, but are not presently regulated for their water quality impacts.

- **Not all activities which cause nonpoint source groundwater contamination are directly regulated.** The TWC and Texas Department of Health (TDH) currently have a voluntary program for the protection of municipal water wells. However, Houston is the only local government in the watershed currently participating. The is a current effort underway by TWC to enlist communities in this program.

- **Water pollution threats may exist from landfill sites which are already closed.** While today's regulations governing landfill design and post-closure manintenance have extensive provisions for groundwater protection, the watershed does contain some older, closed landfills which may at some point pose a threat to groundwater.

Coordination

- **EPA NPDES Stormwater Regulations are not clear as to how permitting will be handled in large, multi-jurisdictional urban areas.** Houston and the Harris County Flood Control District (HCFCD) will probably have to file some type of joint permit application. It is not known whether an HCFCD permit application will encompass Pasadena, Deer Park and LaPorte, or whether each city will be required to have its own permit. Permitting on a watershed-wide basis would be the most comprehensive management approach, but would be difficult to implement and administer.

Opportunities

- **There appear to be opportunities for local land use and development/construction ordinances to be used in NPS management.** Examples include erosion control on construction projects and land use controls aimed at preventing contamination in well recharge zones.

NATURAL AND LIVING RESOURCE MANAGEMENT

Gaps-Wetlands

- **The Section 404 program only covers dredge and fill disposal projects.** Other alterations to the wetlands environment, such as draining and clearing, are not regulated under the Clean Water Act, but through various other regulations and inter-agency agreements.

- **Many minor dredge and fill projects are authorized under general or nationwide permits without individual review.** As a result, the cumulative impact of numerous small projects is unknown.

- **Section 404 permit reviews do not fully evaluate environmental impacts.** Of particular concern is the lack of adequate assessments of the impacts of dredge and fill projects on non-game, non-endangered or threatened species and habitat.

- **There is no comprehensive inventory or monitoring of the extent of wetlands in the Armand Bayou watershed.** Owing to the level of analysis required, wetlands determinations are made only upon request on a case-by-case basis.

- **Enforcement of violations of Section 404 has been limited.** It is particularly difficult to monitor and enforce violations on small projects.

- **Management of small parcels exchanged for filled wetlands is difficult.** Land exchange is an accepted mitigation technique in the permitting process. However, it is difficult and costly to manage numerous small parcels.

Overlaps and Coordination-Wetlands

- **Final authority in enforcing wetlands legislation is unclear.** Permitting and enforcement of the section 404 program is jointly handled by the Corps of Engineers and the Environmental Protection Agency under a Memorandum of Agreement. However, as written, it appears as though each agency has the authority to overrule the other, based on economic or environmental concerns.

- **Concerns exist about the effectiveness of multi-agency review process.** Under the Fish and Wildlife Coordination Act, other federal agencies such as the Fish and Wildlife Service review permits for associated environmental impact. However, permits have been issued in spite of concerns expressed by reviewing agencies.

  At the state level, TWC and the Texas Parks and Wildlife Department also certify section 404 permits. However, these agencies currently conduct their review outside the context of a state coastal zone management plan.

- **No formal guidance has been given to regulatory agencies for implementing the President's stated "no-net-loss" policy.** "No-net-loss" of wetlands is a stated national objective, however, there is no formal guidance to the agencies involved with permitting and reviewing as to the interpretation of this policy on a case-by-case basis.

Gaps-Other

- **There is generally insufficient monitoring of living resources in the watershed.** There are gaps in the monitoring of shellfish or finfish movements and in monitoring non-game and non-endangered or non-threatened species.

- **There is a general lack of funding for enforcement of natural resource protection regulations.** The Texas General Land Office (GLO), for example, currently has a field staff of 3 to cover the 4.5 million acres of submerged lands under its jurisdiction.

- **Wildlife and habitat protection regulations generally only cover endangered, game or commercially valuable species.** The habitat value of Armand Bayou is not known and the watershed does not contain any major fisheries. Nonetheless, the living resources are

important to many residents in the surrounding area. Aside from the Coastal Preserves Program, there are limited tools to ensure against alterations of Armand Bayou.

- **Nursery habitat provisions cover only coastal zone management program.** This is one of two coastal states which does not currently participate in the federal coastal zone management program. As a result, agencies such as the TWC and Texas Parks and Wildlife Department (TPWD) review and certify Section 404 permits outside the context of an overall plan.

  The Texas General Land Office (GLO) is currently developing a Coastal Management Plan along with TPWD and other agencies. However, no funds for this plan have been appropriated by the Texas Legislature.

Overlaps and Coordination-General

- **Coordination of programs often suffers from differing orientations of participating agencies.** At the federal level, the Corps of Engineers has a development orientation, whereas the EPA and FWS are conservation-oriented. At the state level, the GLO has a revenue-generating orientation which may not always be consistent with the conservation objectives of the TPWD. Additional coordination and development of consensus environmental objectives would make administration of regulations more effective, particularly in cases of joint administration and multi-agency reviews of permits.

PUBLIC HEALTH

Gaps

- **Closure criteria for shellfish beds (oysters) are based on general weather patterns and not on monitored water quality or other individual case evaluations.** Closures are based on a set number of consecutive days of rainfall over a certain amount for the entire state. Variations of different waterbodies are not taken into account.